

Amendments to the Claims:

1. (Currently Amended) A computer implemented method for maintaining a database of objects accessible by applications written in a plurality of programming languages comprising:

receiving an instance of a first object to store in a database, wherein the first object is implemented in a first programming language;

receiving an instance of a second object to store in the database, wherein the second object is implemented in a second programming language;

generating at least a first structured document representing the instance of the first object and including a representation of the attributes and attribute values in the first object;

generating at least a second structured document representing the instance of the second object and including a representation of the attributes and attribute values in the second object;

adding content of the first structured document representing the first object into the database;

adding content of the second structured document representing the second object into the database;

providing access to the database of objects such that application programs implemented in the first and second programming languages are capable of sharing objects, in their respective programming language, represented as structured documents in the database; and

wherein the database comprises a structured document, and wherein adding the content of each structured document representing one object comprises inserting the content of the structured document representing the object into the structured document implementing the database.

2. (Previously Presented) The method of claim 1, further comprising:

receiving multiple structured documents representing instances of objects defined for a class, wherein the objects represented in at least two different received structured documents were generated in different programming languages.

3. (Cancelled)

4. (Cancelled)

5. (Previously Presented) The method of claim 1, wherein the database structured document and the structured documents representing the objects are in a same file format.

6. (Original) The method of claim 5, wherein the same file format comprises an extensible markup language (XML) document format.

7. (Previously Presented) The method of claim 1, wherein each of the first and second structured documents comprises an extensible markup language (XML) document.

8. (Previously Presented) The method of claim 1, wherein the first and second objects are instantiated from a same class.

9. (Currently Amended) A computer implemented method for accessing a database of objects originally instantiated in at least two different programming languages, comprising:

- generating an instance of a first object including attributes and attribute values defined for a class in a first programming language;
- generating an instance of a second object including attributes and attribute values defined for the class in a second programming language;
- generating a first structured document representing the first object and a second structured document representing the second object;
- transferring each structured document to the database to maintain;
- providing access to the database of objects such that application programs implemented in the first and second programming languages are capable of sharing objects, in their respective programming language, represented as structured documents in the database; and

wherein the database comprises a structured document, and wherein transferring each structured document into the database to maintain comprises inserting the content of the first and second structured documents into the structured document implementing the database.

10. (Previously Presented) The method of claim 9, further comprising:

- receiving the first structured document from the database representing attributes and attribute values for the first object originally instantiated in a first programming language; and
- generating a third object in the first, second, or a third programming language that includes the attributes and attribute values represented in the first structured document,

wherein the generated object embodies the first object represented by the received first structured document.

11-13. (Cancelled)

14. (Previously Presented) The method of claim 10, wherein the database structured document and the first and second structured documents are in a same file format.

15. (Original) The method of claim 14, wherein the same file format comprises an extensible markup language (XML) document format.

16. (Previously Presented) The method of claim 9, wherein each of the first and second structured documents comprises an extensible markup language (XML) document.

17. (Previously Presented) The method of claim 9, wherein the first and second objects are instantiated from a same class.

18. (Currently Amended) A system for maintaining a database of objects, comprising:

means for receiving an instance of a first object and an instance of a second object to store in a database, wherein the first object is implemented in a first programming language and the second object is implemented in a second programming language;

means for generating a first structured document and a second structured document representing the instance of the first object and the instance of the second object, respectively;

means for adding content of the first and second structured documents respectively representing the first and second objects into the database;

means for providing access to the database of objects such that application programs implemented in the first and second programming languages are capable of sharing objects, in their respective programming language, represented as structured documents in the database; and

wherein the database comprises a structured document, and wherein adding the content of each structured document representing one object comprises inserting the content of the structured document representing the object into the structured document implementing the database.

19. (Previously Presented) The system of claim 18, further comprising:
means for receiving multiple structured documents representing instances of objects defined for a class, wherein the objects represented in at least two different received structured documents were generated in different programming languages.

20. (Cancelled)

21. (Cancelled)

22. (Previously Presented) The system of claim 18, wherein the database structured document and the first and second structured documents representing the objects are in a same file format.

23. (Original) The system of claim 22, wherein the same file format comprises an extensible markup language (XML) document format.

24. (Previously Presented) The system of claim 18, wherein each of the first and second structured documents comprises an extensible markup language (XML) document.

25. (Previously Presented) The system of claim 18, wherein the first and second objects are instantiated from a same class.

26. (Currently Amended) A system for accessing a database of objects by a plurality of applications, comprising:

means for generating an instance of a first object and a second object, the first object including attributes and attribute values defined for a class, in a first programming language and the second object including attributes and attribute values defined for the class in a second programming language;

means for generating a first and second structured document representing the first and second objects respectively;

means for transferring each structured document to the database to maintain;

means for providing access to the database of objects such that application programs implemented in the first and second programming languages are capable of sharing objects, in their respective programming language, represented as structured documents in the database;

means for inserting content of the first and second structured documents into the database; and

wherein the database comprises a structured document.

27. (Previously Presented) The system of claim 26, further comprising:
means for receiving the first structured document from the database representing attributes and attribute values for the first object; and
means for generating a third object including the attributes and attribute values represented in the first structured document, wherein the generated object embodies the first object represented by the received first structured document, and the generated object is implemented in the first, second, or third programming language.

28-30. (Cancelled)

31. (Previously Presented) The system of claim 27, wherein the database structured document and the first and second structured documents representing the objects are in a same file format.

32. (Original) The system of claim 31, wherein the same file format comprises an extensible markup language (XML) document format.

33. (Original) The system of claim 26, wherein the structured document comprises an extensible markup language (XML) document.

34. (Previously Presented) The system of claim 26, wherein the first and second objects are instantiated from a same class.

35. (Currently Amended) An article of manufacture for maintaining a database of objects wherein the article of manufacture comprises code implemented in a computer readable medium capable of causing a processor to perform:

receiving an instance of a first object and an instance a second object to store in a database, wherein the first object is implemented in a first programming language and the second object is implemented in a second programming language;

generating a first and second structured documents, wherein the first structured document representing the instance of the first object and the second structured representing the instance of the second object;

adding content of the first and second structured document respectively representing the first and second object into the database;

providing access to the database of objects such that application programs implemented in the first and second programming languages are capable of sharing objects, in their respective programming language, represented as structured documents in the database; and

wherein the database comprises a structured document, and wherein adding the content of the first and second structured documents comprises inserting the content of the first and second structured document into the structured document implementing the database.

36. (Previously Presented) The article of manufacture of claim 35, wherein the code is further capable of causing the processor to perform:

receiving multiple structured documents representing instances of objects defined for a class, wherein the objects represented in at least two different received structured documents were generated in different programming languages.

37. (Cancelled)

38. (Cancelled)

39. (Previously Presented) The article of manufacture of claim 35, wherein the database structured document and the structured documents representing the objects are in a same file format.

40. (Original) The article of manufacture of claim 39, wherein the same file format comprises an extensible markup language (XML) document format.

41. (Original) The article of manufacture of claim 35, wherein the structured document comprises an extensible markup language (XML) document.

42. (Previously Presented) The article of manufacture of claim 35, wherein the first and second objects are instantiated from a same class.

43. (Currently Amended) An article of manufacture for accessing a database of objects by a plurality of applications, the plurality of applications written in at least two different programming languages, wherein the article of manufacture comprises code implemented in a computer readable medium capable of causing a processor to perform:

generating an instance of a first object including attributes and attribute values defined for a class in a first programming language;
generating an instance of a second object including attributes and attribute values defined for the class in a second programming language;
generating a first structured document representing the first object and second structured document representing the second object;
transferring each structured document to the database to maintain;
providing access to the database of objects such that application programs implemented in the first and second programming languages are capable of sharing objects, in their respective programming language, represented as structured documents in the database;
inserting content of the first and second structured documents into the database; and wherein the database comprises a structured document.

44. (Previously Presented) The article of manufacture of claim 43, wherein the code is further capable of causing the processor to perform:
receiving the first structured document from the database representing attributes and attribute values for the first object; and
generating a third object including the attributes and attribute values represented in the first structured document, wherein the generated object embodies the first object represented by the received first structured document, and the generated object is implemented in the first, second, or a third programming language.

45-47. (Cancelled)

48. (Previously Presented) The article of manufacture of claim 44, wherein the database structured document and the first and second structured documents representing the objects are in a same file format.

49. (Original) The article of manufacture of claim 48, wherein the same file format comprises an extensible markup language (XML) document format.

50. (Previously Presented) The article of manufacture of claim 43, wherein each of the first and second the structured documents comprises an extensible markup language (XML) document.

51. (Previously Presented) The article of manufacture of claim 43, wherein the first and second objects are instantiated from a same class.

52. (Currently Amended) A computer readable medium including a computer database of objects, comprising:

a first and second structured documents, wherein the first structured document representing an instance of a first object including attributes and attribute values defined for a class in a first programming language and the second structured document representing an instance of a second object including attributes and attribute values defined for the class in a second programming language;

a database interface to receive a request to store the instance of the first and second objects to the database and to store content of the first and second structured documents into the database; and

wherein the database interface further provides access to the database of objects such that application programs implemented in the first and second programming languages are capable of sharing objects, in their respective programming language, represented as structured documents in the database, wherein the database comprises a structured document, and wherein the first and second structured documents respectively representing the first and second objects are added to the database by inserting the content of the first and second structured documents into the structured document implementing the database.

53. (Previously Presented) The computer readable medium of claim 52, wherein the database stores multiple structured documents representing instances of objects defined for a class, and wherein the objects represented in at least two different structured documents stored in the database were generated in different programming languages.

54. (Cancelled)

55. (Cancelled)

56. (Previously Presented) The computer readable medium of claim 52, wherein the database structured document and the first and second structured documents are in a same file format.

57. (Original) The computer readable medium of claim 56, wherein the same file format comprises an extensible markup language (XML) document format.

58. (Original) The computer readable medium of claim 52, wherein the structured document comprises an extensible markup language (XML) document.

59. (Previously Presented) The computer readable medium of claim 52, wherein the first and second objects are instantiated from a same class.